Application No.: 09/975,350

Office Action Dated: September 30, 2008

REMARKS

In a Request for Continued Examination ("RCE") filed on June 2, 2008, Applicants amended claims 1, 15, 41 and 42 and canceled certain other claims. In response to Applicants' submission, all rejections of the pending claims under 35 U.S.C. § 102(b) were withdrawn in the pending Office Action (dated Sept. 30, 2008).

Claims 1, 3, 4-8, 13, 15-35, 45-50, 55, 59, 63, and 66 now stand rejected under 35 U.S.C. § 103(a) as allegedly obvious over certain cited prior art. Applicants respectfully disagree and, for the reasons that follow, submit that the pending claims are allowable.

I. Rejections Under 35 U.S.C. § 103

A. Legal Standard

To establish a *prima facie* case of obviousness, there must be a clearly articulated reason or rationale, either in the prior art itself or in the knowledge generally available to one of ordinary skill in the art, why the claimed invention is obvious in light of a reference or combined reference teachings. MPEP §§ 2143, 2143.01; *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1739-43, 82 USPQ2d 1385, 1395-97 (2007). There must also be a reasonable expectation of success. MPEP § 2143.02. Further, the cited prior art must address every element of the claim at issue. MPEP § 2143.03. The rationale to make the claimed combination and the reasonable expectation of success must be found in the prior art and not be based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 493 (Fed. Cir. 1991).

B. Discussion

1. The Combination of Nguyen and Esteve Fails To Establish That Claim 1 is *Prima Facie* Obvious

The Office Action alleges at paragraph 5 that Nguyen (U.S. Patent 5,843,347) in combination with Esteve (U.S. Patent 6,566,404) renders Applicants' claims 1, 3, 4, 8-13, 15, 17-35, 45-47, 55, 59, 63 and 66 obvious. But because the proposed combination fails to address every element of Applicants' claims, Applicants respectfully submit that the proposed combination does not make out a *prima facie* case of obviousness.

Applicants' claim 1 recites, *inter alia*, "a non-aqueous liquid solution comprising a modafinil compound . . . characterized in that the solution *spontaneously forms* [a] homogenous, stable composition of non-crystalline particles when contacted with an aqueous

Application No.: 09/975,350

Office Action Dated: September 30, 2008

medium" (emphasis added; see also paragraph [0073] in the instant application). But neither Nguyen nor Esteve address this element of Applicants' claim.

Nguyen lacks any discussion of a composition capable of forming a homogeneous mixture when contacted with an aqueous medium. Instead of describing a composition capable of spontaneously forming a homogeneous composition of non-crystalline particles, Nguyen describes compositions that require application of external force to achieve a homogeneous state. This is first made clear by Nguyen FIG. 1, which figure shows a rotary stirrer (101) that homogenizes the ingredients used to form compositions according to that reference (see also Nguyen at col. 8, lines 17-24). Nguyen's failure to disclose compositions capable of spontaneously forming homogeneous mixtures is further underscored at column 11, line 28 (describing preparation of a composition wherein "the ingredients are dispersed by means of a homogenizer") and at column 12, line 47 (mixture of phases A and B where "homogenization of the resulting mixture by means of an apparatus of the Turrax [high shear mixer] type"). Given that Nguyen discloses only compositions that require mechanical assistance to form homogeneous mixtures, that reference does not disclose, let alone even contemplate, a "non-aqueous liquid solution comprising a modafinil compound . . . characterized in that the solution spontaneously forms [a] homogenous, stable composition of non-crystalline particles when contacted with an aqueous medium."

Applicants note that the Office Action suggests at paragraph 15 that "[t]he composition of Nguyen is a non aqueous solution comprising modafinil and surfactant and would *inherently* have the characteristic that when it is contacted with [an] aqueous medium it would inherently form aqueous, liquid, homogeneous, stable composition of non-crystalline particles" (emphasis added). But Nguyen's lack of discussion addressing this element of Applicants' claim 1 forecloses the Office Action's inherency argument. The burden on the Patent Office to establish that a particular property is "inherent" is a high one – as the MPEP makes clear, rejections cannot be based on data or information not actually present in the cited prior art: "[t]he fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." MPEP § 2112.IV (emphasis added). The Federal Circuit has likewise condemned conclusions based on evidence not of record; "[the] evidence must make clear that the missing descriptive matter is necessarily present in the thing described by the reference . . . Inherency may not,

Application No.: 09/975,350

Office Action Dated: September 30, 2008

however, be established by probabilities or possibilities." *In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (emphasis added); *see also* MPEP § 2144.03.A (noting that it is inappropriate to take official notice of facts unless facts are "capable of such instant and unquestionable demonstration as to defy dispute"). Given that Office Action does not identify any factual support for the claim that Nguyen "inherently" discloses compositions capable of spontaneous formation of homogeneous mixtures when contacted with an aqueous medium, this suggestion at paragraph 15 of the Office Action lacks a proper basis and cannot support the asserted rejection of claim 1.

The addition of Esteve does not cure Nguyen's deficiency. Even assuming for the sake of argument Esteve discloses liquid modafinil compositions, Esteve nevertheless – like Nguyen – does not disclose "non-aqueous liquid solution[s] comprising a modafinil compound . . . characterized in that the solution *spontaneously forms* [a] homogenous, stable composition of non-crystalline particles when contacted with an aqueous medium." Accordingly, because the combination of Nguyen and Esteve fails to disclose or otherwise address the claim 1 element of a "non-aqueous liquid solution comprising a modafinil compound . . . characterized in that the solution *spontaneously forms* [a] homogenous, stable composition of non-crystalline particles when contacted with an aqueous medium," the Nguyen-Esteve combination fails to make out a *prima facie* case of obviousness and the rejection of claim 1 over those references should be withdrawn. Further, because the rejection of independent claim 1 is improper and should be withdrawn and those dependent claims should be allowed. *See In re Fine*, 837 F.2d 1071, 1076 (Fed. Cir. 1988) (any claim depending from a non-obvious independent claim is itself nonobvious).

2. The Combination of Nguyen With Grebow and With Hochlowski Does Not Address Every Element of Applicants' Claim 1 and Thus Fails To Establish a *Prima Facie* Case of Obviousness

The Office Action alleges at paragraph 11 that claims 1, 3, 4, 8-13, 15, 17-35, 45-50, 55, 59, 63 and 66 are obvious in light of the combination of Nguyen and Grebow (U.S. Pat. 5,618,845). The Office Action also alleges at paragraph 16 that claims 1, 15 and 16 are obvious in light of Nguyen in combination with Grebow in further view of Hochlowski (U.S.

Application No.: 09/975,350

Office Action Dated: September 30, 2008

Pat. 5,589,485). Applicants respectfully disagree on the ground that this proposed combination does not address every element of Applicants' claims.

a. The Nguyen-Grebow Combination Does Not Address Every Element of Applicants' Claims

Although the Office Action alleges at paragraph 12 that "Nguyen teaches all the critical elements of the claims," Applicants (for the reasons set forth in part II.B.1 of this response) submit that Nguyen fails to disclose or even contemplate "non-aqueous liquid solution[s] comprising a modafinil compound . . . characterized in that the solution *spontaneously forms* [a] homogenous, stable composition of non-crystalline particles when contacted with an aqueous medium."

Grebow fails to cure this deficiency. While Grebow discloses a liquid modafinil composition (*see* Grebow at col. 10, line 20), Grebow contains no disclosure regarding mixtures capable of spontaneously forming homogenous, stable composition of noncrystalline particles when contacted with an aqueous medium. Accordingly, the Nguyen-Grebow combination fails to address every element of Applicants' claim 1, and the rejection of that claim over those references should be reconsidered and withdrawn. Because claim 1 is nonobvious, all claims that depend from claim 1 are also nonobvious and the rejection of those claims should be withdrawn. *In re Fine*, 837 F.2d at 1076.

b. The Nguyen-Grebow-Hochlowski Combination Does Not Address Every Element of Applicants' Claims

As discussed above, the Nguyen-Grebow combination does not render claim 1 obvious. Addition of Hochlowski is suggested only in connection with claim 16 (Office Action at paragraph 17) and therefore does not affect Applicants' contention that claim 1 is not obvious in light of Nguyen and Grebow. To the extent Hochlowski is relied upon to reject claim 1, Hochlowski – like the other cited references – does not disclose or otherwise address compositions capable of spontaneously forming homogenous, stable composition of non-crystalline particles when contacted with an aqueous medium. Thus, the proposed Nguyen-Grebow-Hochlowski combination does not address every element of claim 1 and the rejection of that claim should be reconsidered and withdrawn. Further, because claim 1 is nonobvious, all claims that depend from claim 1 are also nonobvious and the rejection of those claims should be withdrawn. *In re Fine*, 837 F.2d at 1076.

Application No.: 09/975,350

Office Action Dated: September 30, 2008

3. The Combination of Nguyen With Either Shah or Charman Does Not Address Every Element of Applicants' Claim 1 and Thus Fails To Establish a *Prima Facie* Case of Obviousness

The Office Action alleges at paragraphs 8 and 9 that Applicants' claims 1, 3, 4, 8-13, 15, 17-35, 45-47, 55, 59, 63, and 66 are obvious in light of Nguyen in combination with either Shah ("Self-emulsifying drug delivery systems (SEDDS) with polyglycolized glycerides for improving in vitro dissolution and oral absorption of lipophilic drugs," *International Journal of Pharmaceutics*, 106 (1994), pp. 15-23) or with Charman ("Self-emulsifying Drug Delivery Systems: Formulation and Pharmaceutical Evaluation of an Investigational Lipophilic Compound," *Pharmaceutical Research*, Vol. 9, No. 1, 1992 (pp. 87-93)). But because both of these combinations fail to address every element of Applicants' claims, the rejection of claim 1 as obvious in light of these combinations is improper and should be withdrawn.

For the reasons set forth in part II.B.1 of this response, Applicants submit that Nguyen fails to disclose or even contemplate "non-aqueous liquid solution[s] comprising a modafinil compound . . . characterized in that the solution *spontaneously forms* [a] homogenous, stable composition of non-crystalline particles when contacted with an aqueous medium." Neither Shah nor Charman cures this deficiency.

The present invention is distinct from Shah and Charman because those references are neither capable of nor directed toward formulation of a delivery system for modafinil. It is known that modafinil exhibits poor solubility in both lipids and in water (*see* pending application at page 2, lines 11-13 and 35-27; *see also* Jacobs reference – U.S. Patent 6,489,363 at column 1, lines 56-59 – cited in the pending Office Action). The Shah reference is directed toward formulation of an oil-in-water emulsion wherein a lipophilic compound is dissolved within oil droplets that are themselves dispersed in water (*see* Shah at page 15 – Introduction). Thus, Shah is directed toward making systems useful for delivery of *lipophilic* compounds. Shah does not, however, disclose delivery systems for compounds like modafinil that exhibit *poor lipid solubility*, rather than an *affinity for lipids*. Put another way, Shah is directed toward delivery of compounds with solubility characteristics that are qualitatively different from those of modafinil.

Application No.: 09/975,350

Office Action Dated: September 30, 2008

Like Shah, the Charman reference is directed toward making systems useful for delivery of *lipophilic* compounds (Charman at page 87). Charman does not address delivery systems for compounds – like modafinil – that show *poor solubility in lipids* and in water. Charman is thus unsuitable for use in conjunction with modafinil.

The shared deficiency of the Shah and Charman references is not cured by their combination with Nguyen. Nguyen merely discloses a process for preparing freeze-dried particles and does not disclose dispersion of modafinil. Thus, combination of Nguyen with Shah or Charman would yield freeze-dried particles of a lipophilic compound, and such particles are plainly not the subject of the claimed invention. Accordingly, because the Nguyen-Shah/Charman combination does not address the limitations of the claimed invention, the obviousness rejection of claim 1 over those references should be reconsidered and withdrawn. Further, because claim 1 is nonobvious, all claims that depend from claim 1 are also nonobvious and the rejection of those claims should be withdrawn. *In re Fine*, 837 F.2d at 1076.

III. Double Patenting Rejection

The Office Action alleges at paragraph 18 that claims 1, 3, 4, 8-13, 15, 17-35, 45-50, 55, 59, 63 and 66 are subjected to nonstatutory obviousness-type double patenting over claims 1-29 and 35-39 of U.S. Patent 6,489,363 to Jacobs. Without conceding the propriety of this rejection, in the interest of advancing prosecution, Applicants submit herewith a terminal disclaimer over the Jacobs patent, rendering the rejection moot.

IV. Conclusion

For all of the foregoing reasons, Applicants submit that the rejections of the pending claims under 35 U.S.C. § 103(a) are improper in light of the cited prior art and should be withdrawn. Accordingly, Applicants respectfully request that the Examiner (1) reconsider and withdraw the pending rejections, and (2) pass the pending claims to allowance.

Application No.: 09/975,350

Office Action Dated: September 30, 2008

Applicants respectfully submit that the present application is in condition for allowance. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided. Favorable consideration and an early notice of allowance are respectfully requested.

Date: November 25, 2008 / Aaron B. Rabinowitz /

Aaron B. Rabinowitz Registration No. 61,943

Woodcock Washburn LLP Cira Centre 2929 Arch Street, 12th Floor Philadelphia, PA 19104-2891

Phone: 215-568-3100 Fax: 215-568-3439